

Title (en)

Synchronization of frames transmitted over multiple parallel transmission paths in a cellular communications network according to a common connection-specific timing reference

Title (de)

Synchronisierung von Rahmen, die über eine Mehrzahl von parallelen Übertragungswegen in einem zellularen Kommunikationsnetz übertragen werden, gemäß einer gemeinsamen, verbindungs-spezifischen zeitlichen Referenz

Title (fr)

Synchronisation de trames transmises sur des voies de transmission multiples et parallèles dans un réseau cellulaire de communications selon un référence temporelle commune spécifique à la connexion

Publication

EP 1610474 A2 20051228 (EN)

Application

EP 05108181 A 19991105

Priority

- EP 99956044 A 19991105
- FI 982399 A 19981105
- FI 990499 A 19990308
- FI 991184 A 19990525

Abstract (en)

A mechanism for encrypting transmission of frames in a telecommunications network comprising a mobile station (MS), a radio network controller (SRNC) and at least one base station (BS1, BS2). The mobile station (MS) and each base station (BS1,BS2) have a corresponding timing reference (MSFN,BS1FN,BS2FN). The mechanism comprises the step of establishing a connection-specific timing reference which is common to all nodes (MS,BS1,BS2,RNC) involved in the connection and which comprises a common frame numbering scheme agreed between the mobile station (MS) and the radio network controller (SRNC) while establishing the connection, wherein said reference comprises a connection-specific frame number (CFN) and a frame number extension (HFN); the mobile station (MS) and the radio network controller (SRNC) use the CFN and the HFN for ciphering and deciphering the frames.

IPC 1-7

H04B 7/26; **H04L 9/00**

IPC 8 full level

H04L 7/00 (2006.01); **H04W 56/00** (2009.01); **H04B 7/26** (2006.01); **H04L 9/00** (2006.01); **H04W 92/10** (2009.01)

CPC (source: EP US)

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Citation (applicant)

- WO 9857450 A1 19981217 - ERICSSON TELEFON AB L M [SE]
- WO 9508899 A1 19950330 - NOKIA TELECOMMUNICATIONS OY [FI], et al
- WO 9747111 A1 19971211 - NOKIA MOBILE PHONES LTD [FI], et al
- FI 990500 A 20000909 - NOKIA MOBILE PHONES LTD [FI]
- FI 980209 A 19990730 - NOKIA MOBILE PHONES LTD [FI]

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Designated extension state (EPC)

BA HR YU

DOCDB simple family (publication)

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DOCDB simple family (application)

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